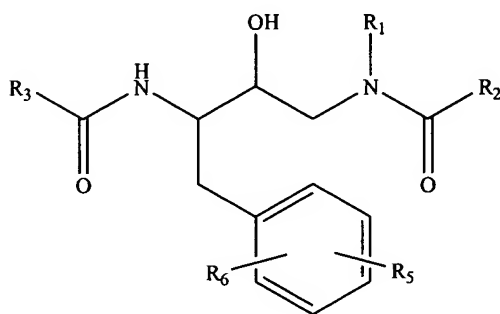


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 (previously presented): A method for modulating the processing of an amyloid precursor protein (APP), said method comprising contacting a composition containing said APP with an aspartyl protease inhibitor having the formula:



(I)

wherein:

R₁, R₂ and R₃ are members independently selected from the group consisting of alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl, substituted aryloxyalkyl, heteroaryl, substituted heteroaryl, heteroarylalkyl, substituted heteroarylalkyl, heterocycles, substituted heterocycles, heterocyclicalkyl and substituted heterocyclicalkyl; and

R₅ and R₆ are independently selected from the group consisting of hydrogen, halogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl and substituted aryloxyalkyl; or R₅ and R₆ and the carbons to which they are bound join to form an optionally

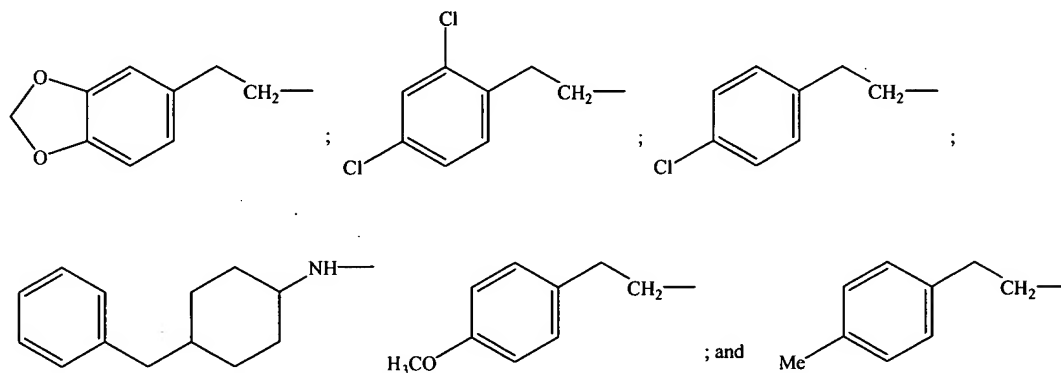
substituted carbocyclic or heterocyclic fused ring system having a total of
9- or 10-ring atoms within said fused ring system.

2 (original): The method according to claim 1, wherein:

R₁ is a member selected from the group consisting of substituted alkylaryl,
substituted aryl, substituted alkyl and substituted heterocyclic groups.

3 (original): The method according to claim 2, wherein:

R₁ is a member selected from the group consisting of:

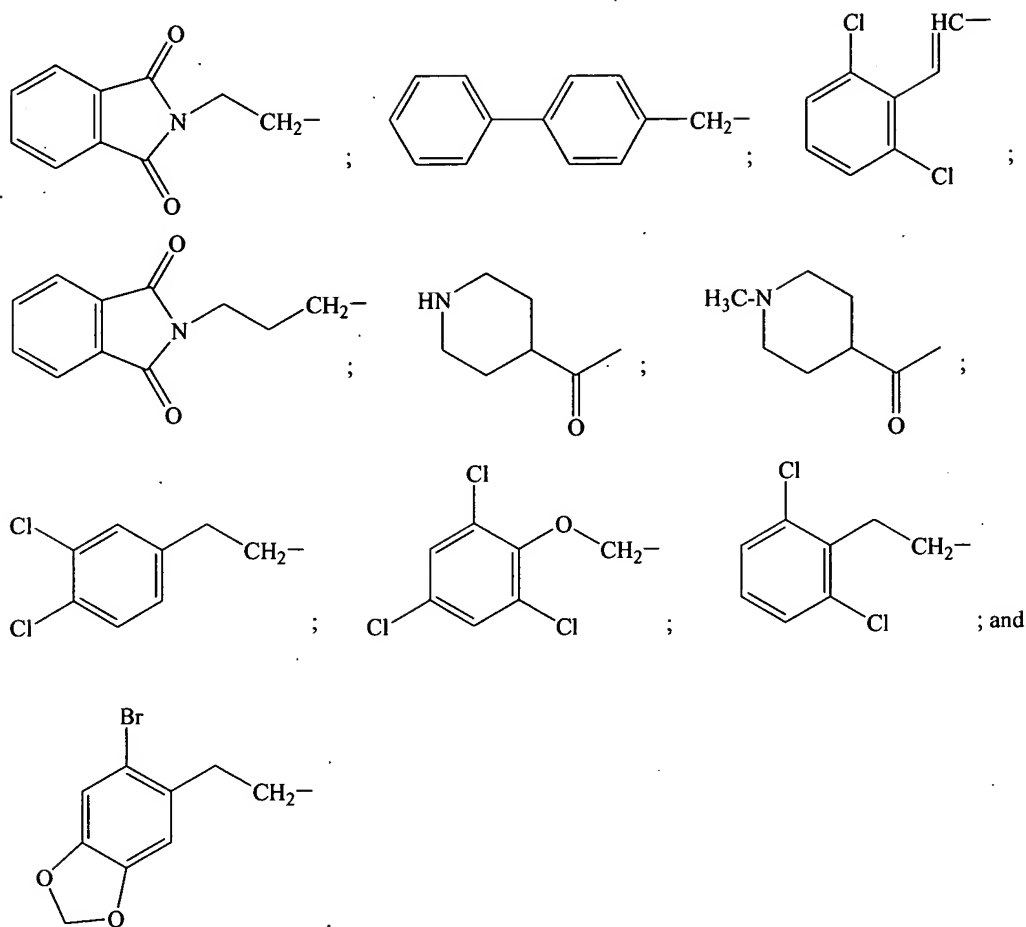


4 (original): The method according to claim 1, wherein:

R₂ is a member selected from the group consisting of substituted alkyl,
heterocyclic and substituted heterocyclic groups.

5 (previously presented): The method according to claim 4, wherein R₂ is a

member selected from the group consisting of:

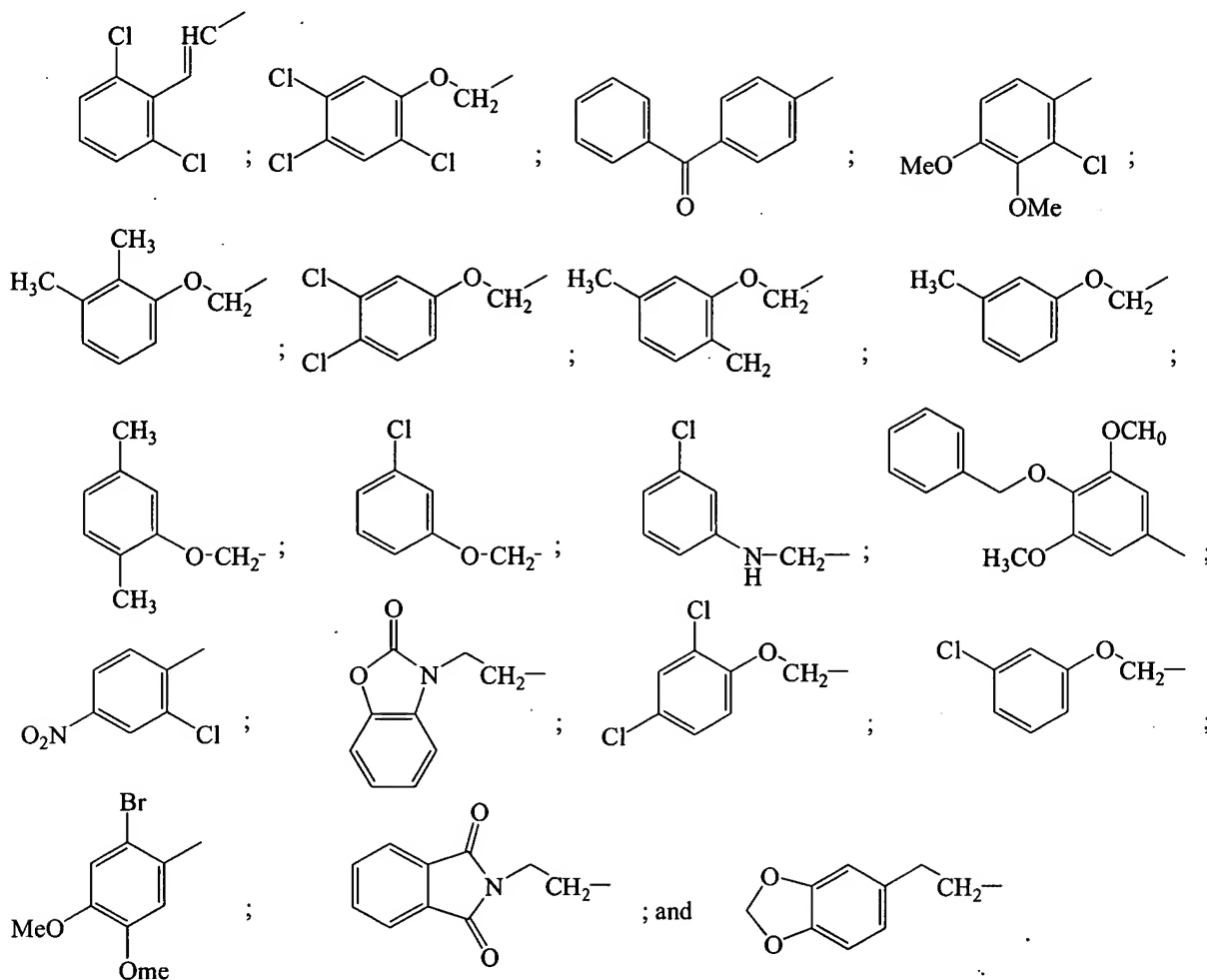


6 (original): The method according to claim 1, wherein:

R_3 is a member selected from the group consisting of substituted alkyl and substituted aryl groups.

7 (original): The method according to claim 6, wherein R_3 is a member selected

from the group consisting of:



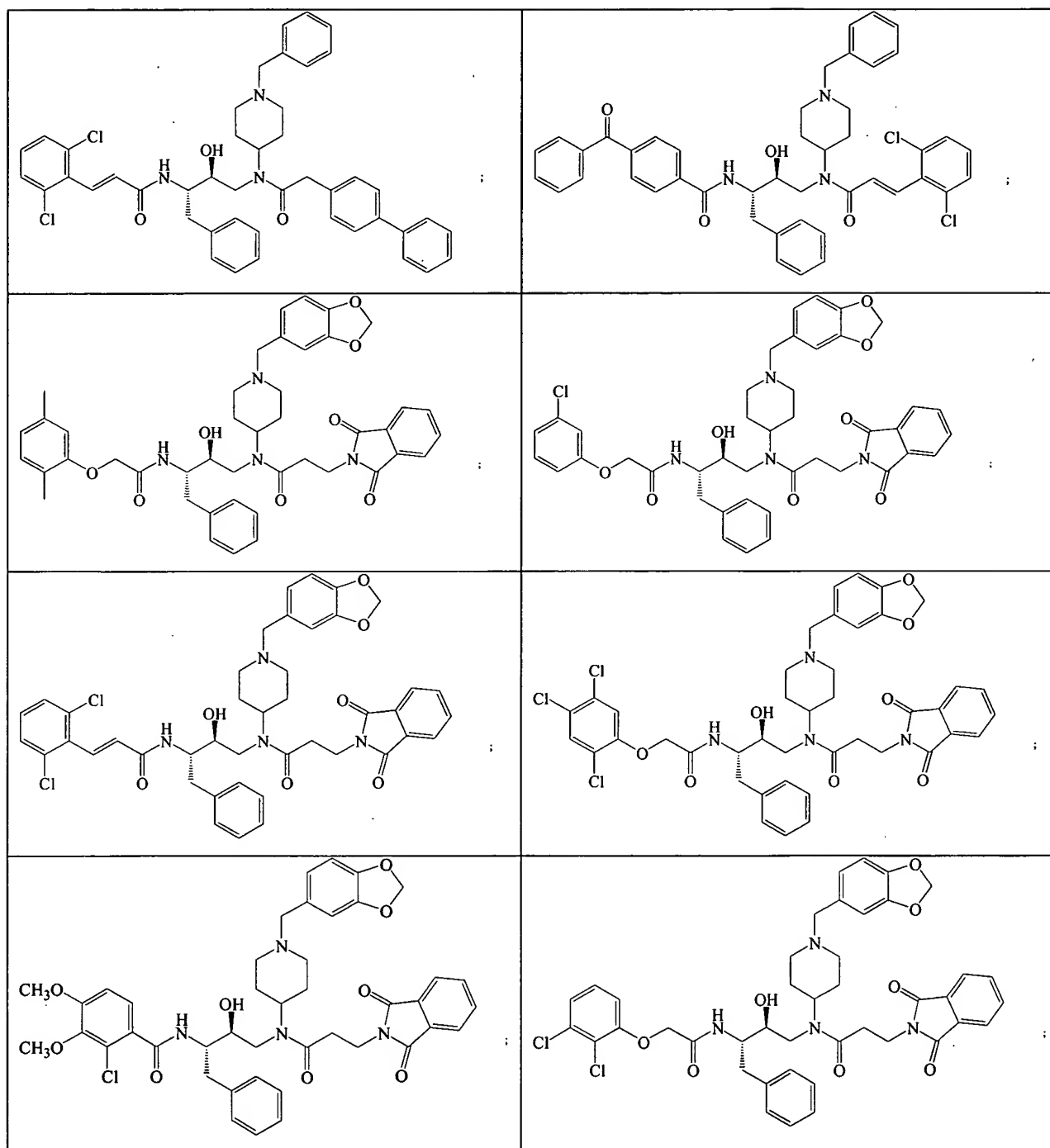
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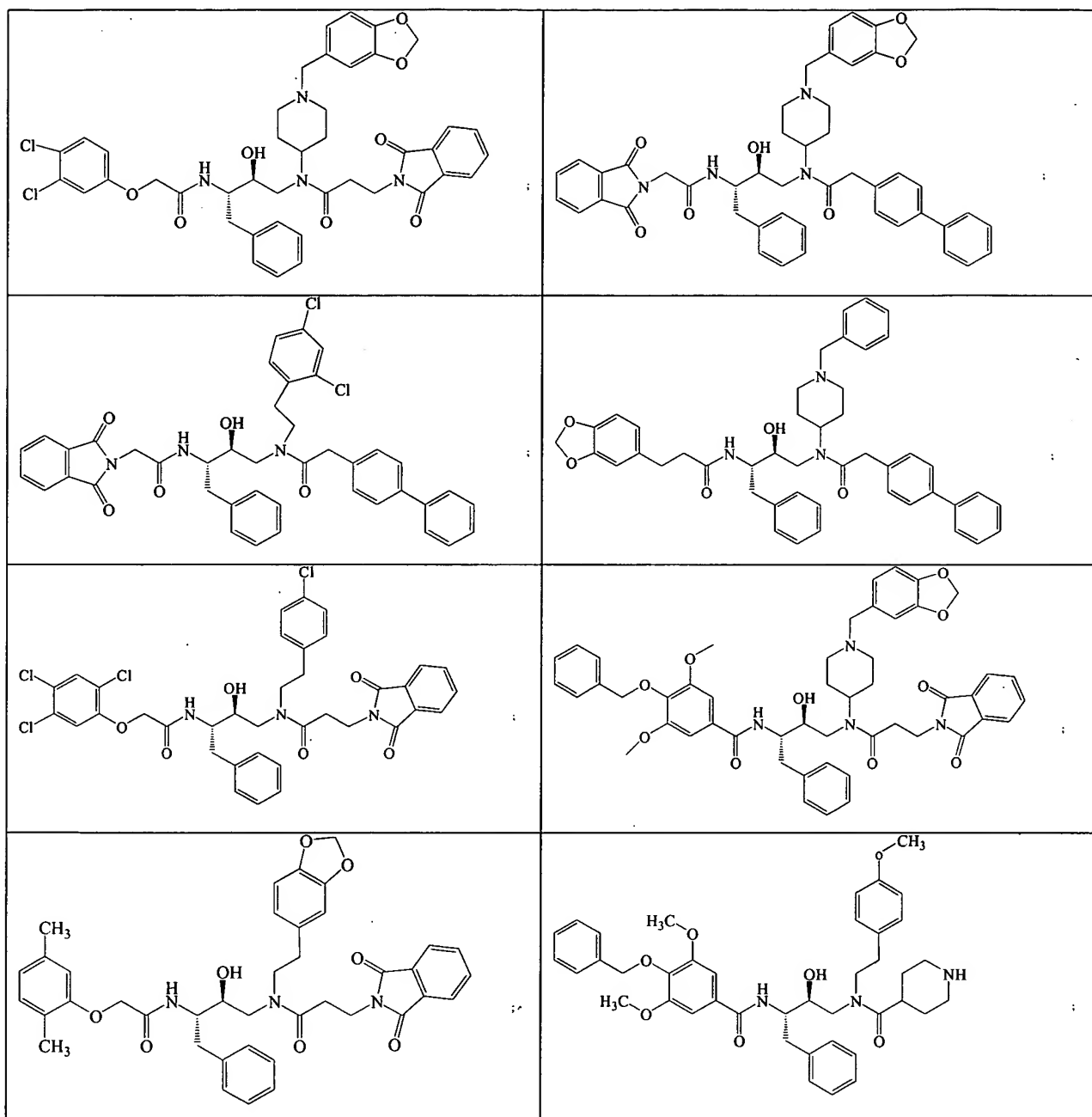
1 8 (original): The method according to claim 1, wherein R₅ and R₆ and the
2 carbons to which they are bound form an optionally substituted naphthalene ring.

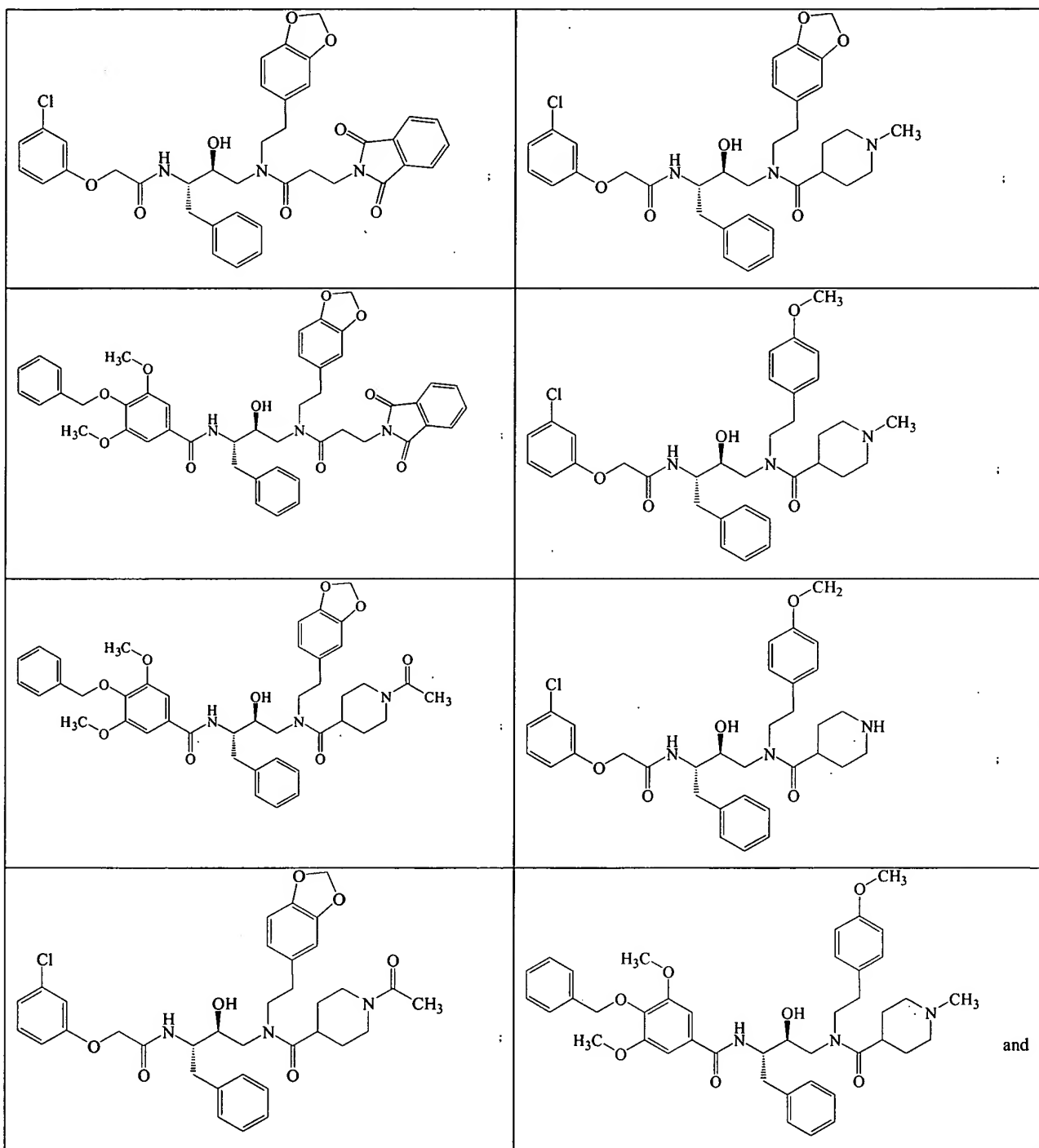
1 9 (original): The method according to claim 1, wherein R₅ and R₆ are both
2 hydrogen.

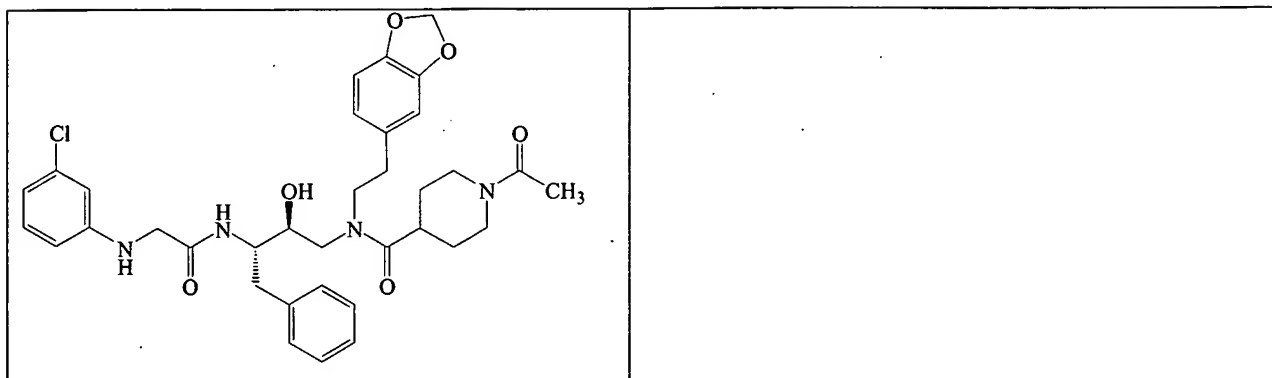
1 10 (original): The method in accordance with claim 1, wherein R₅ is hydrogen
2 and R₆ is meta or para to R₅ and is a member selected from the group consisting of halogen,
3 alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl and
4 substituted aryloxyalkyl.

- 1 11 (original): The method according to claim 1, wherein said aspartyl protease
2 inhibitor is a member selected from the group consisting of:





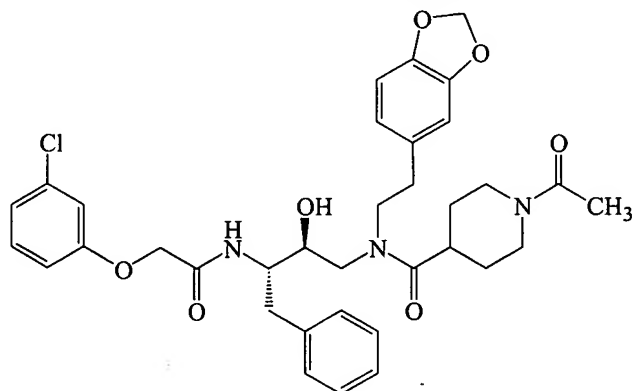




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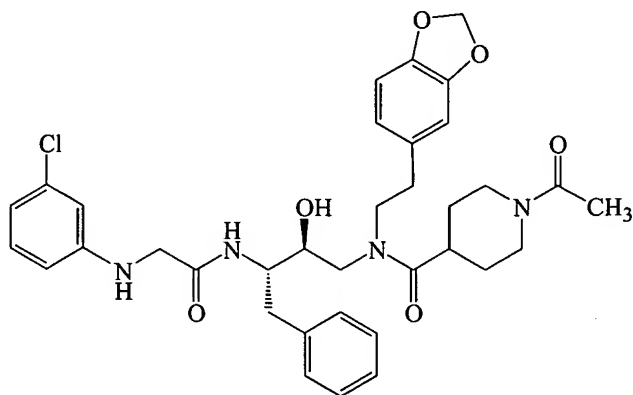
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1 12 (original): The method according to claim 1, wherein said aspartyl protease
2 inhibitor is a member selected from the group consisting of:



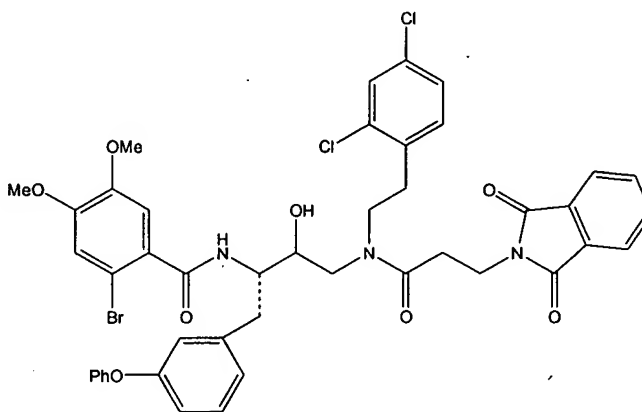
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and

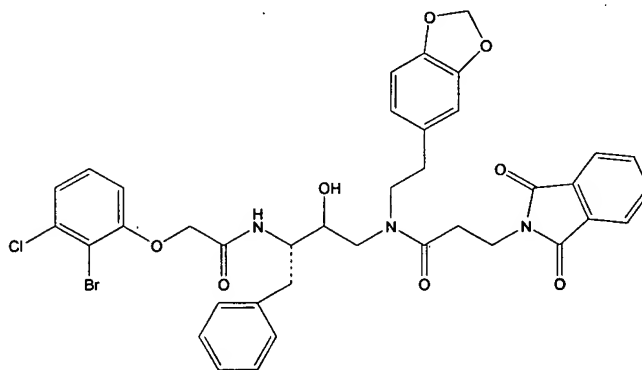


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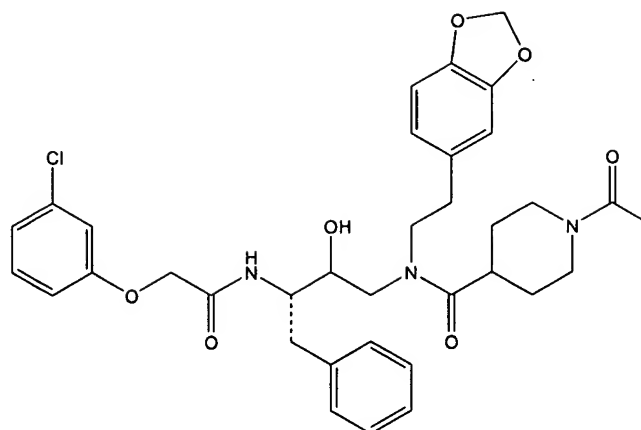
1 13 (previously presented): The method in accordance with claim 1, wherein said
2 aspartyl protease inhibitor is a member selected from the group consisting of
3 CEL5-A having the following structure:



4
5 CEL5G having the following structure:



6
7 EA 1 having the following structure:



8

1 14 (original): The method in accordance with claim 1, wherein said composition
2 is a body fluid.

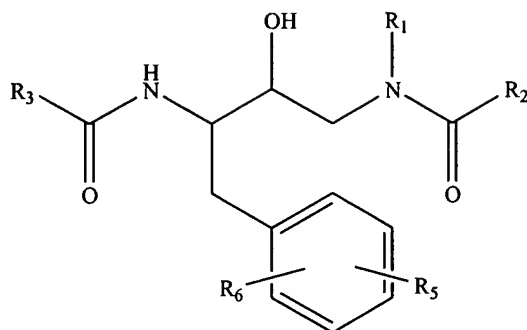
1 15 (previously presented): The method in accordance with claim 14, wherein
2 said body fluid is cerebral spinal fluid.

1 16 (original): The method in accordance with claim 1, whereby formation of
2 amyloidogenic A β peptides (A β) is decreased compared to the amount formed in the absence of
3 said aspartyl protease inhibitor.

1 17 (original): The method in accordance with claim 1, whereby formation of α -
2 sAPP is increased compared to the amount formed in the absence of said aspartyl protease
3 inhibitor.

1 18 (original): The method in accordance with claim 1, wherein the modulation is
2 effected by modulating the activity of cathepsin D.

1 19 (previously presented): A method for modulating the processing of a tau-
2 protein (τ -protein), said method comprising contacting a composition containing said τ -protein
3 with an aspartyl protease inhibitor having the formula:



(I)

wherein:

R_1 , R_2 and R_3 are members independently selected from the group consisting of alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl, substituted aryloxyalkyl, heteroaryl, substituted heteroaryl, heteroarylalkyl, substituted heteroarylalkyl, heterocycles, substituted heterocycles, heterocyclicalkyl and substituted heterocyclicalkyl; and

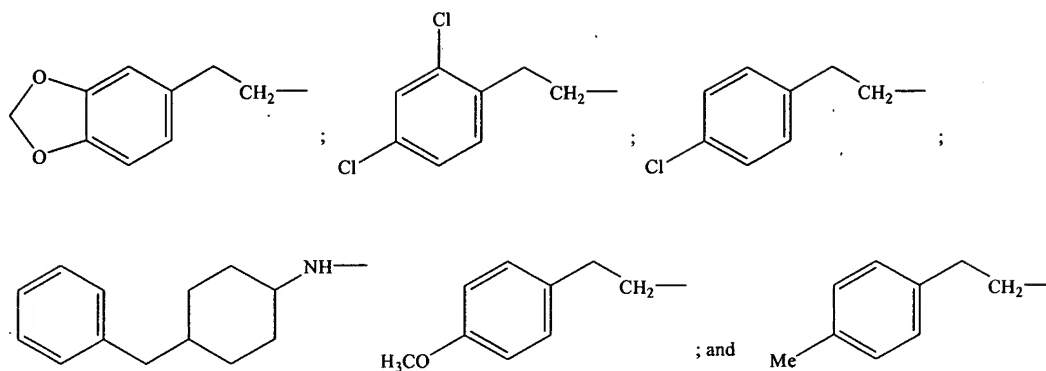
R_5 and R_6 are independently selected from the group consisting of hydrogen, halogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl and substituted aryloxyalkyl; or R_5 and R_6 and the carbons to which they are bound join to form an optionally substituted carbocyclic or heterocyclic fused ring system having a total of 9- or 10-ring atoms within said fused ring system.

20 (original): The method according to claim 19, wherein:

R_1 is a member selected from the group consisting of substituted alkylaryl, substituted aryl, substituted alkyl and substituted heterocyclic groups.

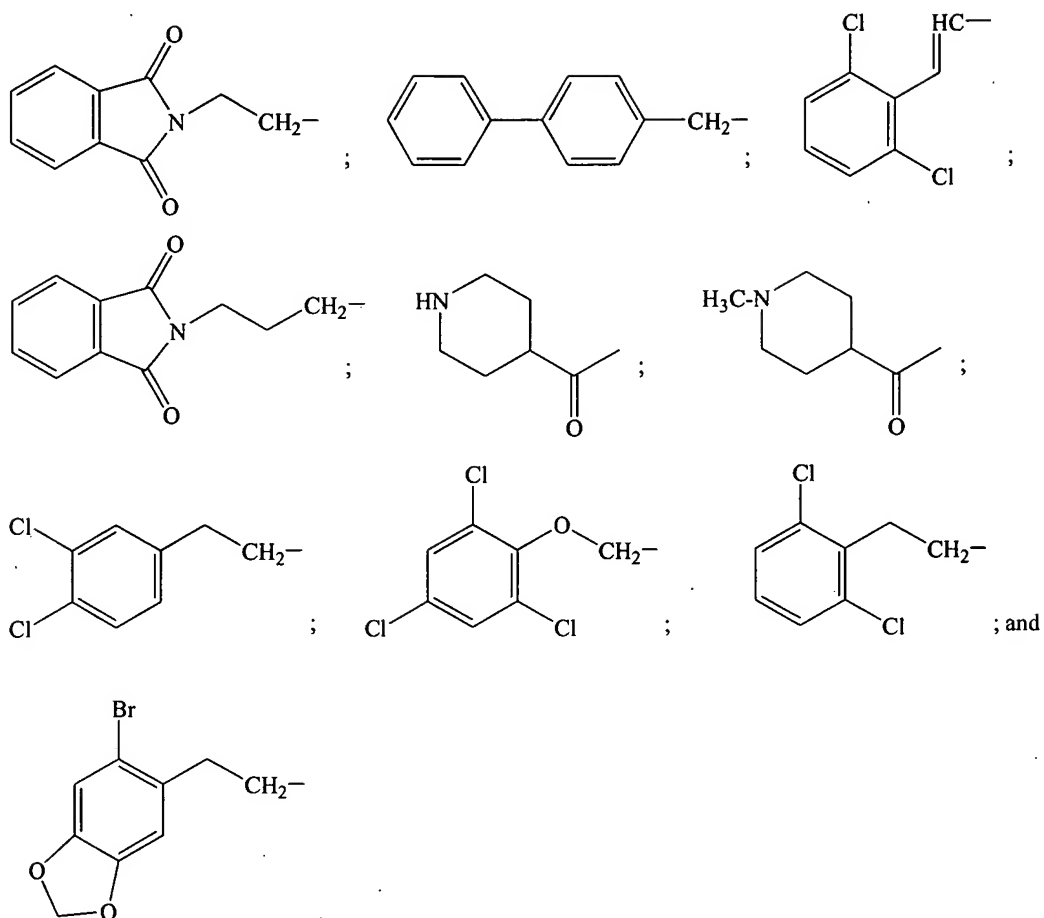
21 (original): The method according to claim 20, wherein:

R_1 is a member selected from the group consisting of:



22 (original): The method according to claim 19, wherein:
R₂ is a member selected from the group consisting of substituted alkyl,
heterocyclic and substituted heterocyclic groups.

23 (previously presented): The method according to claim 22, wherein R₂ is a
member selected from the group consisting of:

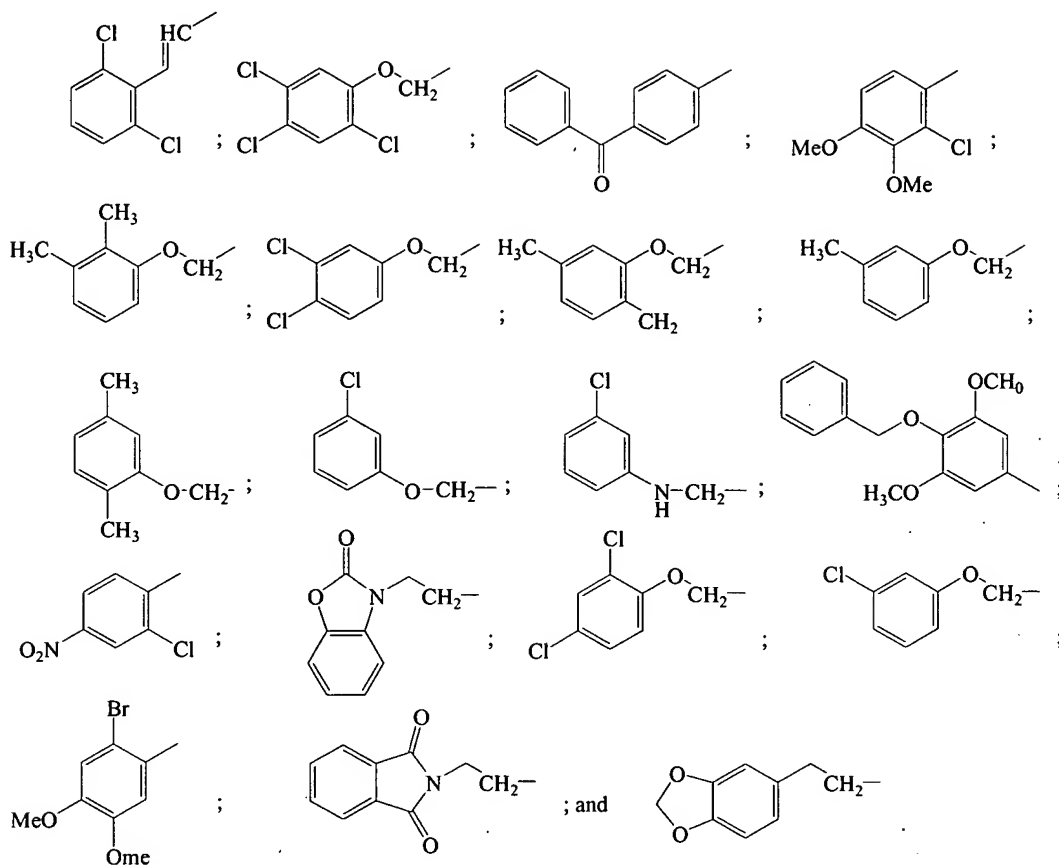


24 (original): The method according to claim 19, wherein:

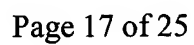
R₃ is a member selected from the group consisting of substituted alkyl and substituted aryl groups.

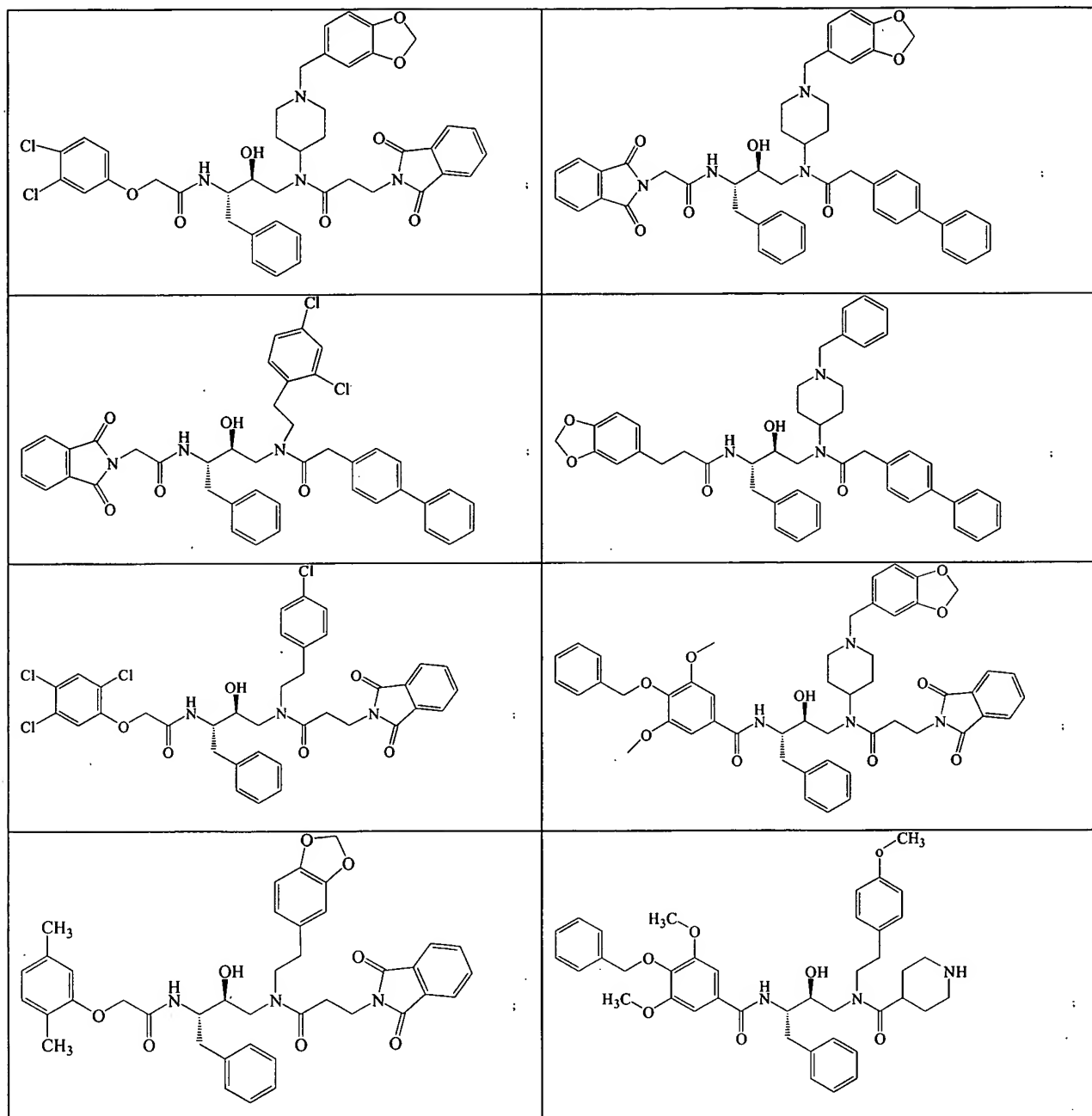
25 (original): The method according to claim 24, wherein R₃ is a member

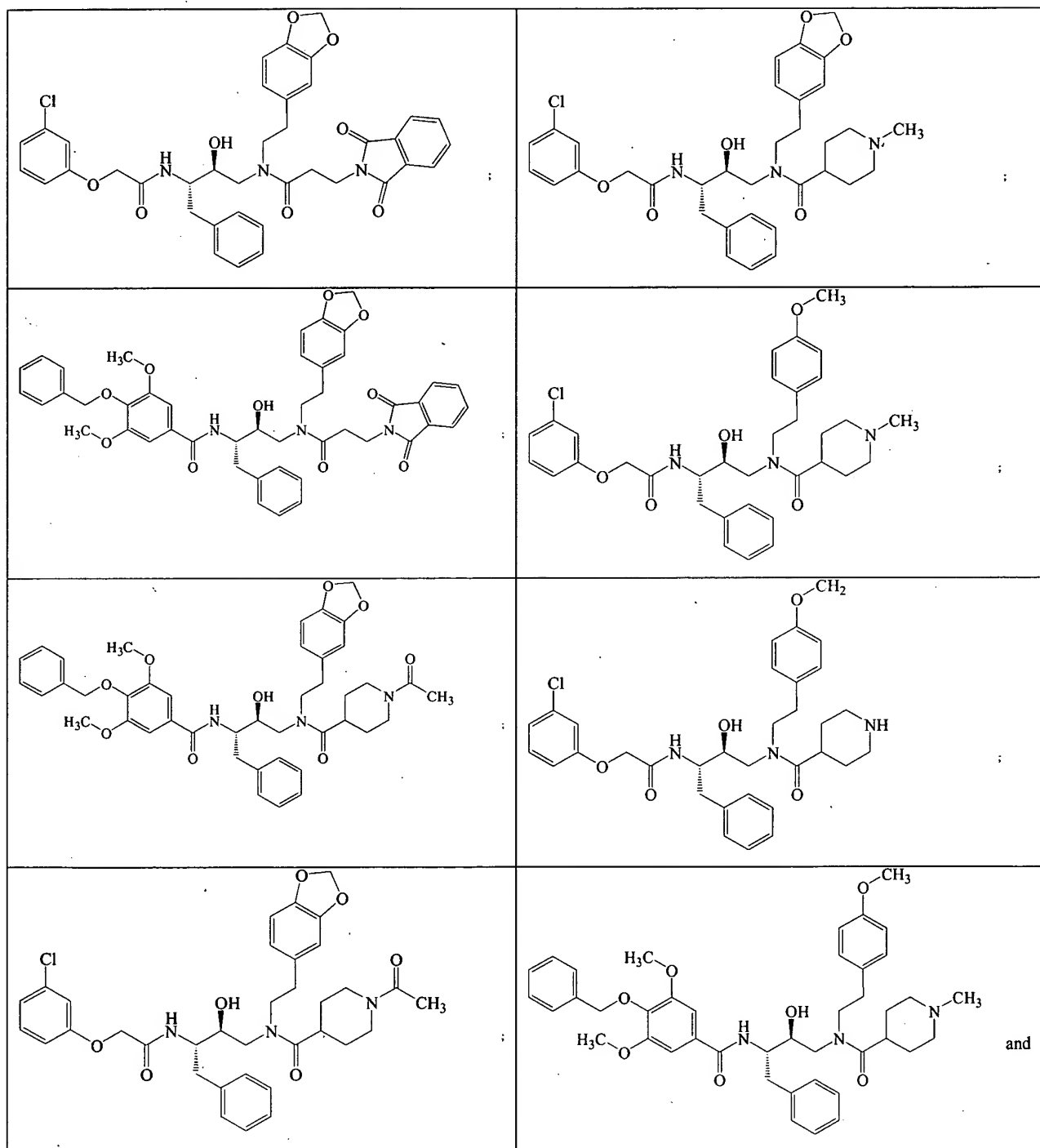
selected from the group consisting of:

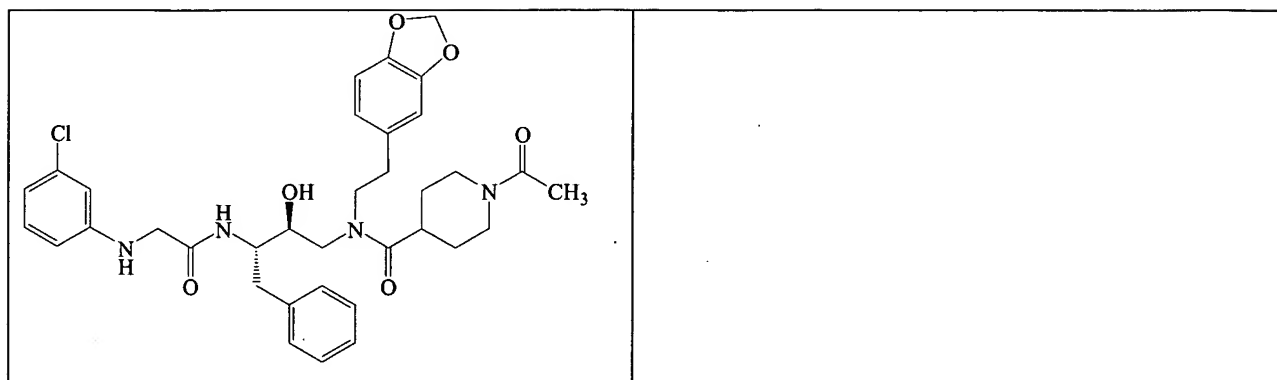


29 (original): The method according to claim 19, wherein said aspartyl protease inhibitor is a member selected from the group consisting of:

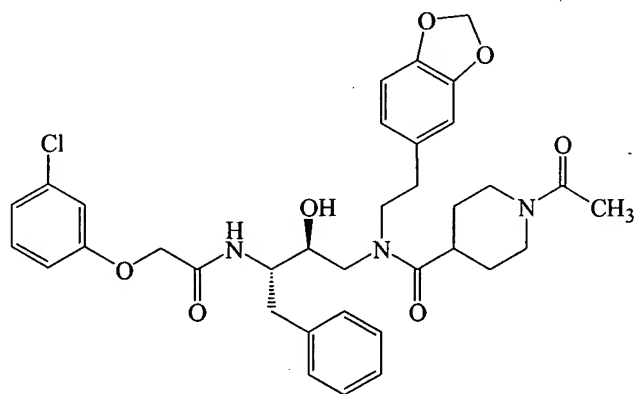




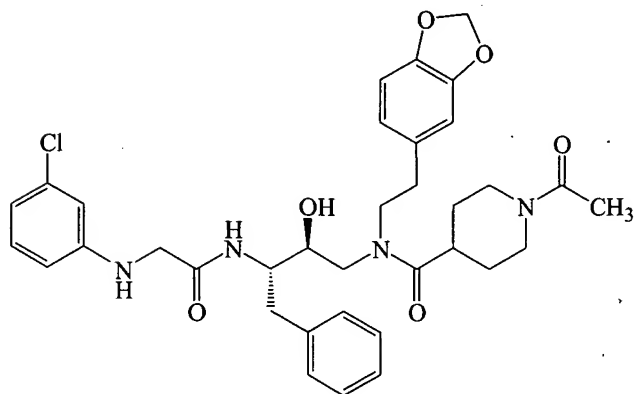




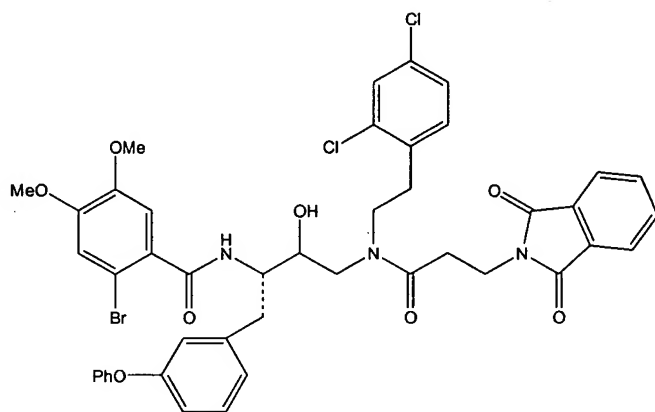
- 3
- 1 30 (original): The method according to claim 19, wherein said aspartyl protease
- 2 inhibitor is a member selected from the group consisting of:



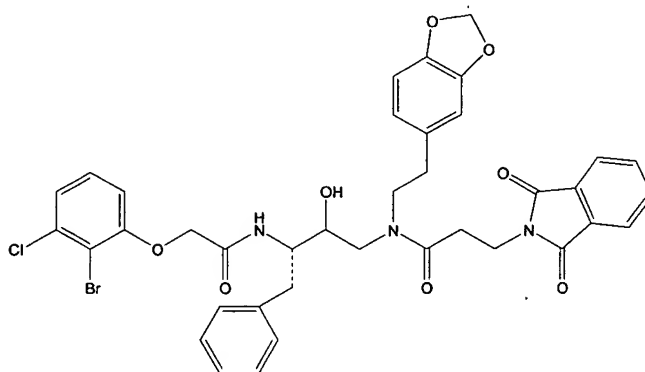
and



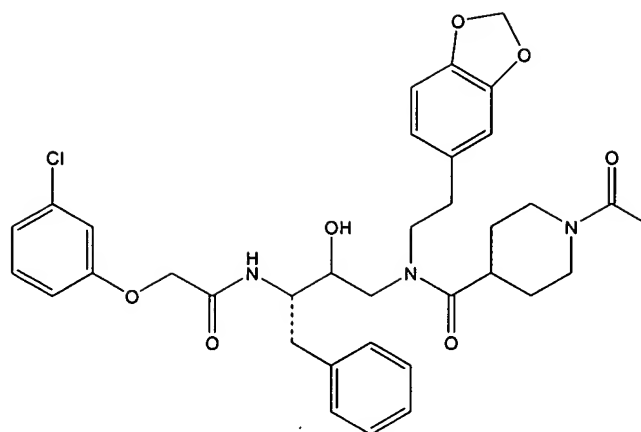
31 (previously presented): The method in accordance with claim 19, wherein
said aspartyl protease inhibitor is a member selected from the group consisting of
CEL5-A having the following structure:



CEL5G having the following structure:



EA 1 having the following structure:



8

1 32 (original): The method in accordance with claim 19, wherein said
2 composition is a body fluid.

1 33 (previously presented): The method in accordance with claim 32, wherein
2 said body fluid is cerebral spinal fluid.

1 34 (original): The method in accordance with claim 19, whereby formation of τ -
2 fragments is decreased compared to the amount formed in the absence of said aspartyl protease
3 inhibitor.

1 35 (original): The method in accordance with claim 19, wherein the modulation
2 is effected by modulating the activity of cathepsin D.

36-50 (canceled)